#### GOVERNOR'S WATER/WASTEWATER WORKS ADVISORY BOARD

Minutes of October 29-30, 2013 Meeting, held at ADEC Environmental Health Lab, 5251 Hinkle Road, Anchorage, Alaska.

**Attendees:** Mark Buggins, Board Chairman

Mike Pollen, Board Recorder Jana Littlewood, Board Member Paul Trissell, Board Member William Justice, Board Member Richard Steckel, Board Member Daniel Hines, Board Member

**Absent:** Bruce Jones, Board Member

ADEC Staff: Carrie Bohan, ADEC Operations Assistance Program, Manager

Ken Smith, ADEC Operations Assistance Program Martin Suzuki, ADEC Operations Assistance Program

Other Attendees: October 29, 2013 only:

Greg Jones, GV Jones & Associates, Inc.

Jeff Axmann, Asplund WWTP Superintendent, AWWU

David Persinger, PE, Civil Engineer, AWWU Michael Fezatte, WWT Operator 4, AWWU

October 30, 2013 only:

Guy Miller, AKWS, Contract Operator for Creekwood Apartments

Doug Crowther, Castle Creek CM, Creekwood Apartments

Owner's Representative Lorna Matter, ALSC

Dave Kranich, Northern Utility Systems

## October 29, 2013, 10:07 AM

A workshop was held to review issues for the October 29-30, 2013 Board meeting. Greg Jones, PE, and three representatives from AWWU (see attendance list for October 29 above) provided a technical presentation to the Board on the agenda item "Asplund Chlorination System." Greg and the AWWU staff members answered questions from the Board members about the planned new chlorine generation system. Further deliberation on this matter was reserved for the October 30 meeting.

October 30, 2013, 8:33 AM

Chairman Mark Buggins called the meeting to order. The agenda for the meeting was accepted as printed in the Board notes by unanimous agreement.

# REVIEW AND APPROVAL OF MINUTES OF NOVEMBER 13-14, 2012 BOARD MEETING

Approval of the November 13-14, 2012 minutes: Richard Steckel moved and Jana Littlewood seconded approval of the minutes and the Board approved the motion by unanimous vote.

**AGENDA ITEM:** Chairman Mark approved the ADEC Department Update agenda item be advanced forward in the schedule to accommodate other previously scheduled agenda items this morning.

**Department Update:** Carrie Bohan provided an update on the Operator Assistance Program budget. Galen Heffern and Martin Suzuki provided an update of the following program activities:

- **a. Budget Update** Carrie Bohan provided an update on the ADEC Training and Certification Program budget history and current status. She noted that Drinking Water State Revolving Fund set aside funds are declining at approximately 5% per year.
- **b.** Exam Results Martin Suzuki presented the ABC certification exam results through October 16, 2013.
- **c. FY14 Contract Updates** Martin updated the Board on the training and certification contracts status for 2014
- **d. Operator Certification Report to the EPA** Ken Smith presented a copy of the ADEC's Annual Operator Certification Program Report to the EPA. The full text of the report was provided in the Board book.
- **e. Reimbursement Program** Carrie Bohan provided an update on the end of the operator reimbursement program. Funding for this program is no longer available.
- **f. System Specific Training Module Development Update** Carrie presented an update on a mid year meeting in Anchorage by the contractor (Cadmus Corporation) and the volunteer module review committee. The second edition of the first three modules has been delivered to ADEC.

- **g. ABC Update** Carrie noted that Ken Smith would be inducted as a new Board Member of ABC at their annual conference in Charlotte, NC in January. Carrie and Ken will be attending the conference.
- h. Train the Trainer Session Carrie noted that ADEC sponsored a Train the Trainer workshop for course presenters and other State of Alaska staff last May immediately after the statewide Alaska Water Wastewater Association conference in Anchorage.
- i. ANTHC Funding of O&M Training Program Through AVTEC Carrie noted that ANTHC has received some training funds for short-term intensive O&M training of rural operators at the AVTEC in Seward.

## 9:10 AM PUBLIC TESTIMONY ON NON-AGENDA ITEMS

There was no public testimony provided.

## AGENDA ITEMS, CONTINUED:

**9:30 AM Creekwood Apartments Water Treatment System (PWSID #220154) Proposed AMOSS Plan:** Ken Smith reviewed a chronology of events that have occurred with this water system since the Board's review of a previous AMOSS submittal at the November 2012 meeting. The Board did not approve the 2012 AMOSS plan submittal.

The following people attended the October 30, 2013, workshop and answered questions posed by the Board on the proposed AMOSS plan.

- Guy Miller, AKWS, Contract Operator for Creekwood Apartments
- Doug Crowther, Castle Creek CM, Creekwood Apartments Owner's Representative

Significant developments over the past year were reviewed by Ken Smith and include:

- December 2012 performance testing of the surface water filtration system by contractor Northern Utility Services (NUS) resulted in inconsistent operation.
- January 2013 A Court Order/Entry of Judgment and associated lien paperwork for an Administrative Penalty of \$18,600 against the Creekwood Apartments owner was received by ADEC and forwarded to the EH Director for signature.
- February 2013 Contractor Northern Utility Services (NUS) notified ADEC that they had terminated their services to the owner of this PWS. The owner of Creekwood Apartments issued a boiled water notice.

- March 2013 ADEC in Wasilla notified by residents of the Creekwood Apartments that the water system was not providing water. A failed water distribution pressure pump was identified as the cause and was repaired.
- April 2013 ADEC performs a site inspection and discovers that filter backwash water was being discharged to the surface of the ground outside the apartment mechanical room. Two contract operators were running the water treatment system without approval, and ADEC issued an order to discontinue treating water and to provide hauled potable water to the facility. ADEC issues an NOV for 10 violations of the ADEC drinking water regulations relating to the modification and operation of a public water system. The owner hired Garness Engineering to work on the water system.
- May 2013 An ADEC inspection of this water system encountered continued discharge of backwash water to the surface outside the mechanical room. No operator was on site, but one finally arrived to stop the backwash tank overflow, which was the source of the leak. Residents complained to the ADEC staff about poor water quality and health issues that they claim were related to the water quality. After additional complaints from residents, ADEC ordered the owner to shut down the water treatment system and to haul potable water to the apartment. ADEC prepared a second Administrative Penalty for assessment against the owner of the system. The second assessment totaled \$219,200.
- June 2013 DNR submits pictures of a surface discharge that appears to be a failure of the onsite wastewater treatment system.
- July 2013 Residents of the Apartment complex notified ADEC that they had been running out of water daily for over a week. ADEC Engineering Support and Plan Review section raise concerns about disposing filter backwash water through the existing onsite wastewater mound disposal system.
- August 2013 ADEC issues Creekwood Apartments an Interim Approval to
  Operate for modifications completed on the water system. ADEC notes that a
  WT3 certified operator is required to operate this system. The effluent disposal
  system continued to be monitored for possible failure to accommodate the filter
  backwash water.
- September 2013 The system operator notifies ADEC that high turbidity levels from a storm event had limited water production and water shortages in the facility could be expected. ADEC issues a boiled water notice to the owner of the Creekwood Apartments due to repeated loss of pressure in the system.

 October 2013 – Legal counsel for NUS notifies the ADEC that the owner of Creekwood Apartments was holding NUS responsible for the \$219,200 Administrative Penalty. ADEC staff is advised to refer all attorney inquiries to Assistant Attorney General Chris Peloso.

A new AMOSS planned dated October 17, 2013, prepared by Guy Miller of AK Water Solutions and further edited by Doug \_\_\_\_\_\_, the Creekwood Apartments owner's representative, was presented in the Board book and was reviewed by the Board.

Richard Steckel moved approval and Paul Trissel second a motion to approve the AMOSS plan. The owner's representative and contract operator explained some of the details of the proposed AMOSS plan. Guy Miller noted that Creekwood Apartments has been operating on the water from this treatment system exclusively since October 14. Some problems with iron in the finished water were noted and actual output is approximately 14 gpm. Additional finished water storage is being procured and a 960-gallon water hauling trailer-mounted tank has been procured to provide backup. The finished water storage is being engineered, but has not yet been submitted for plan review. The owner's representative was uncertain that the storage tanks would be able to be installed within a 90-day deadline set by the owner.

The system is currently only being operated when an operator is on site. A "Sensaphone" has been acquired and is to be installed as an alarm system as there is no SCADA system currently operable on the system. Influent bag filters were changed out from  $25\mu$  to  $5\mu$  pore size, which has reduced the effective of high turbidity events due to rain water. Also, the potassium permanganate and synthetic coagulant were being fed together, which resulted in a reaction between those two chemicals and subsequent inefficient turbidity removal. That has been corrected.

Issues with the AMOSS plan as submitted include:

- 1. The AMOSS plan does not currently have a completion clause showing when the operators will all have the correct level of certification and the plan will be complete.
- 2. The engineer's report from Garness Engineering is missing pages 3&4 of the submittal package describing the process treatment process changes.
- 3. A contract between the owner and the contract operator should be presented in the AMOSS plan submittal.
- 4. System reliability to produce sufficient water volume has not been proven and no hydrological study of the source adequacy to serve this plant has been established. A water rights application to DNR should be completed to help resolve this issue.

- 5. The engineering and installation of capital improvements to bring this system up to a higher degree of reliability and operational performance are not on a specific timeline.
- 6. The proposed lead operator holds a WT1 certificate and this is a Level 3 WTP. AMOSS plans usually do not allow an operator more than one level below the system certification level.
- 7. Operator availability: Chris Sant is working two weeks on two weeks off so is only available on site half of the time. Both Guy Miller and Bruce Jackson are working four days a week, 10 hours per day, so the on site operations time for the plant may be in the evening or at night.

A roll call vote on the motion was taken. All Board members present voted no, except Jana Littlewood who abstained. The motion was defeated.

**Kenai Peninsula Borough School District (KPBSD) Proposed AMOSS Plan:** Martin Suzuki presented a proposed AMOSS plan prepared by the KPBD for 10 NTNC water systems including 9 schools and one maintenance shop operated by the school district. KPBSD has one WT1 operator and two P1 WT operators who oversee the operations of these systems, and the support of a registered professional engineer and approximately 30 maintenance employees on staff with the Kenai Peninsula Borough.

Mike Pollen moved and Richard Steckel seconded a motion to approve the KPBSD AMOSS plan as presented. The motion passed unanimously.

**LKSD Alternative Method of System Supervision Update:** Ken Smith provided an update on the Lower Kuskokwim School District (LKSD) AMOSS plan, which was approved November 14, 2012. A 2012 annual report from Bob Miller, the LKSD AMOSS Supervising Operator in Bethel, was presented. The report shows that LKSD continues their efforts at providing training opportunities for their operators.

ADEC staff presented a spreadsheet showing the compliance status of the LKSD systems, which shows that they are continuing to make progress on their AMOSS plan.

Paul Trissel moved and Carrie Bohan seconded that the LKSD AMOSS plan be approved for another year. The motion approved unanimously.

Ohlson Mountain Mineral Springs Bottling Plant (PWSID #249150) Alternative Method of System Supervision (AMOSS) Plan Update: Ken Smith provided an update on the Ohlson Mountain Mineral Springs Bottling Plant AMOSS plan for the operation of their bottling plant Class 1 potable water system. All objectives of the AMOSS Plan have

been met including one of the owners, Bill Strutz, obtaining his WT1 certification. This AMOSS plan is now complete and has been closed.

Golden Heart Utilities (GHU) Water Treatment Plant AMOSS Plan Update: Ken Smith provided an update on the AMOSS plan to allow a Level 2 operator (Joseph Pascoe), who had already passed the Level 3 exam, to fill the role of a supervising operator of a secondary shift at the Class 4 GHU Water Treatment Plant in Fairbanks. The Board approved the proposed AMOSS plan was approved in November 2012. Mr. Pascoe completed the necessary operating experience and education requirement by May of 2013 and was awarded his Level 3 WT certificate. This AMOSS plan is now complete and has been closed.

**Reporting for Existing AMOSS Plans:** Ken Smith presented a reporting format that has been implemented for existing AMOSS plans. Updates from Anchorage Well and Pump and Northern Utility Services using these forms were presented to the Board. It was explained that one of the purposes of the update reports is to ensure that the systems are classified at the proper certification level and being operated by a properly certified operator.

**Certificate Revocation:** Ken Smith reviewed a situation in which Joe Atkins a Doyon Utilities, LLC WT3 Operator, admitted to falsification of process control pH data at the Fort Richardson WTP. The Board was asked to render an opinion on possible revocation of his WT operations certificate.

Richard Steckel moved and Paul Trissel seconded a motion that the Board move to executive session to discuss this matter. The ADEC staff was requested to remain in the session for the discussion. The motion passed unanimously. Executive session started 11:30 AM and concluded at 12:40 PM.

Jana Littlewood moved and Richard Steckel seconded that as stipulated in Regulation 18 AAC 74.830, that the Board recommend revocation of Joe Atkins's Level 3 WT. All Board members present voted in favor of the motion, except Mike Pollen, who abstained. The motion passed.

**Asplund Wastewater Treatment Facility (AWWTF) Disinfection Classification Determination:** Ken Smith presented the topic of having the Board determine an appropriate point classification for the new chloro-alkali on site generation system being acquired for the AWWTF. The following people attended the October 29, 2013, workshop to present information on the proposed equipment.

- Greg Jones, GV Jones & Associates, Inc.
- Jeff Axmann, Asplund WWTP Superintendent, AWWU
- David Persinger, PE, Civil Engineer, AWWU

• Michael Fezatte, WWT Operator 4, AWWU

Greg Jones presented an overview of the Klorigen On-Site Hypochlorite/Chlorine generation equipment proposed for the Asplund WWTP.

Paul Trissel moved and Mike Pollen seconded a motion to recommend classification of the chloro-alkalai on site generation process at 12 points for purposes of system classification. The Board concurred that with the risk factor associated with gas chlorine (classified at 12 points) versus onsite low-concentration generation of sodium hypochlorite (5 points), this system should be classified at about 10-12 points. The Board also felt that although this appeared to be a reasonable classification level, it would be prudent to review the project at the Asplund WWTF when it is operational to verify that this is an appropriate classification level. The motion passed unanimously.

**Operator Certification Program Regulation Changes:** Carrie Bohan, Ken Smith, and Martin Suzuki presented a working draft of proposed changes to 18 AAC 74. Specific areas for consideration by the Board include:

- 1. Conversion of numbering system from Roman numerals to Arabic lettering. The Board had no objection to this proposal.
- 2. Small Untreated (SU) and Small Treated (ST) versus Very Small System (VSS) Certification. Due to the possibility of burdening numerous SU systems with a more stringent certification process and risking greater noncompliance with the regulations, the Board did not feel that his was a good idea.
- 3. Clarifying regulations to specify that the intent is for exams to be written (re: 18 AAC 74.040, 18 AAC &4.430). The Board agreed with this recommendation.
- 4. Clarifying the definition of "director" by removing "facility construction and operation" and replacing it with "water" (re: 18 AAC 74.900). The Board agreed with this recommendation.
- 5. Change to the certification eligibility criteria with regard to experience at a specific class of system (re: 18 AAC 74.050). The Board agreed with this recommendation.
- 6. Remove all references to OIT certification. The Board agreed with this recommendation.

- 7. Remove compliance transition provision for systems changing in classification. Since all transition deadlines have passed, the Board concurred with this recommendation.
- 8. Changes to or addition of classification points. Revisions to the drinking water regulations and the emergence of new technologies, components and processes necessitate review and possible revision of some of the point classification process. The Board discussed the list of technologies presented on page 103 in the Board book and provided comments and offered suggested classification point values for these.
- 9. Fees revision. The Board generally concurred with the proposed changes.
- 10. Clarify the definition of a Supervising Operator to be an operator certified to the classification of that system. The intent of the proposal is to ensure that the Supervising Operator is certified to the level of the system classification, even if that operator is on call. The Board generally concurred with that. Some discussion also ensued as to the definition of shift. The Board generally felt that it was appropriate to ensure that a properly certified operator is responsible for the plant, but that the utility should have flexibility in what they define as the "normal" working hours.
- 11. Supervision of systems during reduced operations on weekends or other periods when a primary shift operator might not be needed.
- 12. Changes required for compliance and enforcement strategy or System Specific Training and Certification Program implementation. No action was recommended at this time.
- 13. Paying the examination fee along with the application fee when applying for written exams. The Board concurred with this suggestion.

### **OTHER BUSINESS**

It was moved and approved that the meeting be adjourned at 4:55 PM.